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                                                        Docket RAL919990140US1

REMARKS

This amendment is in response to the office action mailed August 13, 2003.

Claims 1-13 and 35-51 are allowed. Claims 14-24 are rejected.

Regarding the allowed claims applicants amend claims 1, 12, 13, 47, 48, 49, 50 and 51 by deleting "the acts of" and "act" in the preamble of these claims. It is believed that the phrase is surplussage and is therefore deleted from the allowed claims. No new matter has been added to these claims; therefore, they will not be discussed further in this document.

Claims 14-24 are rejected under 35 USC 103(a) as being unpatentable over Bremer et al. (US Patent 6,553,002). As set forth herein applicants contend Bremer does not teach certain elements of applicants' claim. As a consequence the claims are not obvious in view of Bremer et al.

EXAMINER ERRED IN CONSTRUING BREMER ET AL.

There appears to be confusion regarding what Bremer et al. teaches. This conclusion is reached because on pages 3 and 4 of the office action the Examiner seems to state (i) a direct table that stores a first address location for a search tree and (ii) at least one bird representing a partial match of the input key; then on page 4 the Examiner states "Bremer does not clearly disclose, 'a direct table that stores a first address location for a search tree and one bird representing a partial match'". This apparent inconsistency

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seems to create confusion resulting in an erroneous conclusion that both elements of applicants' claim are disclosed in the reference.

<u>BREMER ET AL. FAILS TO TEACH KEY ELEMENTS OF APPLICANTS' CLAIM</u>

It is applicants' contention Bremer does not teach, suggest or imply (i) a direct table that stores a first address location for a search tree and (ii) at least one bird representing a partial match of the input key. By providing the direct table and the bird a search can be completed in a much shorter time than would heretofore have been possible. For example, when a bird is present in the search chain the engine which is doing the search can stop and use portion of the bird pattern as the longest prefix match. Without the bird the search would have to be carried out to a leaf and the information stored in the leaf may not match the key. But by placing the bird within the search chain the time for completing the search is much shorter because searching the tree beyond the bird towards a leaf is not necessary. Alternately, if a search is completed and the information in a leaf does not match the key then in retracing the path one only has to start from the location whereat the bird is present. Because points from the bird toward the end node would have been matched to at least portion of the key. In essence, the bird has shortened the period and the procedure for walking the tree (see pages 49-52).

Regarding "direct table . . ." set forth in claim 14 no such teachings or suggestion is set forth in Bremer. Applicants direct the attention of the Examiner to Figures 7 and 8, column 7, lines 58 - column 8, lines 1-15 showing and describing the search table. There is no showing or description of a direct table as set forth in claim 14.

It is applicants' contention that because the recited elements are not present in Bremer et al. applicants' structure is novel. In addition to the structure being novel it

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provides benefits set forth above. Applicants contend that the novel structure together with benefits are indicia of unobviousness. Therefore, the claims are not obvious in view of Bremer et al.

Regarding the dependent claims 15-24 these claims depend on claim 14 and among other things they are patentable over the art of record in view of their dependency.

It is believed that the present amendment answers all the issues raised by the Examiner. Reconsideration is hereby requested and an early allowance of all the claims is solicited.

Respectfully submitted,

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